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Summary of 1972 seasonal results "Decide" superphosphate rates on pastures

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W.A. DEPARTMENT OF AGRICULTURE

SUMMARY OF 1972 SEASONAL RESULTS

"DECIDE" SUPERPHOSPHATE RATES ON PASTURES

In Association with CSIRO and Agribusiness Counsellors

Compiled by: J. W. Bowden

Plant Research Division.

SUMMARY OF FIELD RESULTS 1972 "DECIDE" SUPERPHOSPHATE TRIALS

A total of 53 pasture trials were topdressed. Of these, 37 trials were quantitatively assessed at different times during the growing season. Of the 15 wheat trials sown, only four trials gave useful results because of multiple drilling techniques used on most trials.

Until the trial results have undergone comprehensive statistical analysis, no conclusions can be drawn about the levels of response or "optimum" rates of superphosphate application at individual sites. However, because of the very short growing season in 1972 responses were generally poor. It appears that nil superphosphate application would have been optimum for animal production in the 1972 season at most sites.

The following tables of results are attached:

- I. Location of Trials.
- II. Site Characteristics
- III. Management and Assessment
- IV. Yield data and Analysis of Variance - Pasture Trials.

(J.W. Bowden)
RESEARCH OFFICER.

March, 1973.

TABLE I - 1972 "DECIDE" SUPERPHOSPHATE TRIALS - LOCATION

Expt.No.	CSIRO No.	Farmer	District	Paddock	Type
72BA32	23	R.S.	Badgingarra	2E	Pasture
72BA33	24	R.S.	"	7E	"
72GE46*	42	Mackay	Binnu	19	Wheat
72GE47*	43	Henville	"	3	"
72GE48*	44	Thomas	Northampton	8A	Pasture
72GE49*	45	"	"	8B	Wheat
72ME23*	46	Wahlsten	Walgoolan	18A	Wheat
72ME24*	47	"	"	18B	Pasture
72ME25*	48	"	"	26	Wheat
72ME26*	49	"	"	27	Pasture
72ME27*	50	"	"	29	Wheat
72ME28*	51	Whistler	Merredin	10	"
72ME29*	52	"	"	17	"
72ME30*	54	"	"	33	Pasture
72MO32	27	Slee	Badgingarra	2	Pasture
72MO33	28	"	"	4	"
72MO34	29	Spencer	Watheroo	1	"
72MO35	30	"	"	10B	"
72MO36	31	N. Cattle Co.	Yathroo	B.S.	"
72MO37	32	" " "	Yere x 2	Wolba x 2	"
72MO38	33	" " "	" "	Dand.	"
72MO39	34	" " "	Mungedar	W. Bardia	"
72MO40	35	" " "	"	Murgoo	"
72MO41	36	Richardson	Dandaragan	Veldt N.	"
72MO42	37	"	"	South	"
72MO43	38	Hardie	New Norcia	School	"
72MO44	39	"	" "	Rob's	"
72MO45	40	Joynes	Cadoux	42	"
72MO46	41	"	"	50	"
72MO47*	66	Parker	Piawanning	2D	"
72MO48*	67	"	"	14A	"
72MO49*	68	Barrett-Lennard	W. Kondut	250	"
72MO50*	69	Scotney	N. Kondut	E1 (1)	"
72MO51*	70	"	" "	E1 (2)	"
72MO52*	71	de Gruessa	E. Kondut	5B	"
72MO53*	72	" "	E. Kondut	11A	"
72NA35	1	Bostock	W. Pingelly	Camp	Pasture
72NA36	2	"	" "	Cont. 1	"
72NA37	3	"	" "	Cont. 2	"
72NA38	4	Lyneham	Popanyinning	3.1	"
72NA39	5	"	"	3.2	"
72NA40	6	"	"	14	"
72NA41	8	Whitford	Cuballing	Bus Stop 1	"
72NA42	7	"	"	Bus Stop 2	"
72NA43	9	"	"	Mid Back	"
72NO35	10	Anderson	Dowerin	Top	Pasture
72NO36	11	"	"	Suckon	"
72NO37	12	"	"	Sandhill	"
72NO38	13	Syred	Bolgart	Siding 1	"
72NO39	15	"	"	Centre 1	"
72NO40	16	"	"	Centre 2	"
72NO41	20	Ag. Coll.	Muresk	Jangling	"
72NO42	21	" "	"	Stone Soak	"
72NO43	17	Munckton	York	8	"
72NO44	18	"	"	11A	"
72NO45	19	"	"	11B	"
72NO46	22	R.S.	Yalanbee	JS	"
72NO47*	55	Nottage	Tammin	6	Wheat
72NO48*	56	"	"	17	"
72NO49*	57	"	"	19	Pasture
72NO50*	58	Abe	Corrigin	9	Wheat
72NO51*	59	"	"	13	Pasture
72NO52*	60	"	"	18	"
72NO53*	61	"	"	21	Wheat
72NO54*	62	Shepherd	Kwolyin	1100A	"
72NO55*	63	"	"	1100B	"
72NO56*	64	"	"	R. Grays	"
72NO57*	65	"	"	Top 600	Pasture

*With Agribusiness Councillors.

File No. 3114EX

TABLE II - 1972 "DECIDE" SUPERPHOSPHATE TRIALS - SITE CHARACTERISTICS

Expt Number	Soil and Vegetation	Superphosphate kg/ha. P			B.C.	P. Sorb	Olsen P
		Total	$\Sigma(0.6)^T$	ΣT^{-1}			
72EA32	Badg.S./Gr. Type I. Scrub Plain	225	25.8	40.3	0.4	0.0	5.8
72EA33	Badg.S./Gr. Type I. Scrub Plain	75	33.6	30.2	0.5	0.0	6.6
72GE46*	Deep Yellow S.	65	10.1	13.4	2.0	14.0	4.6
72GE47*	Red L.S.	186	14.6	26.9	2.7	11.5	9.6
72GE48*	Light Grey S.	259	11.2	30.2	2.5	10.0	12.8
72GE49*	Red L.S.	140	7.8	17.9	3.0	22.0	4.8
72ME23*	Red Br.Cl.L. Salmon Gum, Gimlet	134	7.8	17.9	8.5	44.0	5.2
72ME24*	Red Br.Cl.L. Salmon Gum, Gimlet	134	7.8	17.9	6.5	33.0	9.2
72ME25*	Yellow S.L. Mallee, Wodgil	86	7.8	23.5	8.0	52.0	5.8
72ME26*	Yellow S.L. Mallee	108	10.1	17.9	10.0	62.0	7.2
72ME27*	Yellow S.L.Cl.near surface. Salmon Gum	101	4.5	12.3	3.5	15.0	8.2
72ME28*	S.L./Gr.	102	9.0	15.7	6.0	28.0	6.2
72ME29*	Deep, Yellow S.L.	46	7.8	10.1	5.0	34.0	3.0
72ME30*	Grey S.L. Perched water table	199	3.4	16.8	2.5	10.0	9.6
72MO32	Deep, Grey S. E.todtiana & Nuytsia	134	17.9	25.8	0.0	0.0	2.6
72MO33	Grey S.Gr. Scrub Plain	132	17.9	25.8	0.4	0.0	8.0
72MO34	Grey S. near Granite outcrop. Tamma	137	14.6	23.5	2.2	7.5	4.8
72MO35	Deep Yellow S.	130	15.7	23.5	2.0	7.2	6.8
72MO36	Red L.S.Coarse Gr.& country rock. Red Gum	38	4.5	6.7	9.4	50.0	8.7
72MO37	Red Wakea S. Red Gum	113	13.4	20.2	6.5	37.0	4.4
72MO38	Pale Red Wakea S. Red Gum	104	10.1	17.9	4.9	7.8	17.0
72MO39	Red Yellow S.	112	12.3	17.9	5.2	32.5	5.2
72MO40	Red Wakea S. Red Gum	93	19.0	24.6	4.7	23.0	8.8
72MO41	Grey L.S./Cl.@ 45 cm. Nuytsia & E.rudis	114	23.5	28.0	1.0	0.0	7.8
72MO42	Deep, Grey S. E. todtiana	37	17.9	15.7	1.0	2.4	2.2
72MO43	Flooded Gum. Red Gum	140	26.9	32.5	6.0	31.0	9.3
72MO44	S. Gr. White Gum	105	17.9	23.5	5.5	29.0	3.3
72MO45	Solonised Br.Soil. York Gum Mallee	55	7.8	11.2	7.0	39.0	4.3
72MO46	Deep Yellow S. Wodgil, Mallee	76	7.8	13.4	5.8	42.0	4.9
72MO47	Grey S./Red Gr.Mottles & Cl.@ 7 cm. Tamma	199	21.3	32.5	1.5	1.3	8.4
72MO48	Grey S./Yellow S. @ 25 cm	179	21.3	31.4	1.8	6.0	7.2
72MO49	Red Br.Cl.L.& Lime. Salmon Gum, Morrell	248	10.1	28.0	7.0	34.0	10.0
72MO50	Wongan L.S.type. Native Pear, Banksia	141	11.2	21.3	1.8	1.5	11.2
72MO51	Wongan L.S.type. Native Pear, Banksia	141	11.2	21.3	4.2	22.0	5.2
72MO52	Yellow S. Mallee and Wodgil	108	15.7	21.3	6.0	34.0	6.2
72MO53	Grey Br.Gr.L.Cl. E.oleosa, Mallee	164	10.1	21.3	2.0	6.5	12.2
72NA35	S.Gr.; Granite outcrops. White Gum	106	14.6	20.2	5.5	19.0	6.7
72NA36	Grey L.S./Cl. @ 15 cm. York Gum	204	14.6	28.0	3.0	2.0	10.4
72NA37	Red Br. L.S. (York Series)	204	14.6	28.0	4.0	11.0	7.6
72NA38	S/Gr.,Cl.@ 30 cm. Sheoak, White Gum	204	14.6	28.0	3.7	12.0	8.2
72NA39	S/Gr.,Cl.@ 30 cm. Sheoak, White Gum	204	14.6	28.0	3.0	9.0	9.6
72NA40	Yellow Lateritic S.L. Hakea & White Gum	143	25.8	31.4	25.0	155.0	7.0
72NA41	Br. S.Gr. York Gum, Jam	160	12.3	22.0	6.5	27.0	11.4
72NA42	Red Br. L. & Country Rock. York Gum	160	12.3	22.0	6.5	20.0	7.6
72NA43	S.Gr.; York Gum, White Gum, Jam	75	24.6	26.9	8.0	41.0	4.6

TABLE II (C'TD)

Expt Number	Soil and Vegetation	Superphosphate kg/ha. P			B.C.	P.Sorb	Olsen P
		Total	$\sum (0.6)^T$	$\sum T^{-1}$			
72N035	Gr.S./Cl.Gr.@ 10 cm. Tamma, White Gum	121	17.6	24.6	4.5	15.0	9.8
72N036	Gr.S./Cl. Gr.@ 7 cm. Tamma, White Gum	123	11.2	20.2	4.5	-	10.8
72N037	Yellow L.S. E.dryiformis & Native Pear	103	13.4	19.0	2.0	15.0	4.6
72N038	Red Br.S.L. with Fresh Rock. York Gum/ Curara	215	5.6	22.4	4.2	13.5	8.2
72N039	Loamy S./Cl. White Gum	153	9.0	20.2	1.0	0.0	13.2
72N040	Gr.S.L./Cl.near surface. White Gum	153	9.0	20.2	3.5	6.0	10.6
72N041	Depositional Grey S.to 60 cm.York Gum	309	12.3	35.8	2.2	2.0	-
72N042	Red Br.S.L. with Fresh Rock. York Gum	311	14.6	37.0	2.3	0.0	12.4
72N043	Coarse Gr., Br. S. Sheoak. White Gum	300	7.8	31.4	8.5	24.0	11.3
72N044	Siliceous Grey S. White Gum	311	6.7	31.4	2.4	4.0	14.4
72N045	Variable soil type. Discard.	139	1.1	12.3	4.5	11.5	-
72N046	Grey Br. S. Gr. White Gum	112	39.2	39.2	10.0	128	7.9
72N047*	Red Br.L. with Lime. Salmon Gum,Gimlet	199	3.4	19.0	7.0	41.0	4.8
72N048*	Grey Br.L. with Lime. Gimlet,Ti Tree	100	3.4	11.2	10.0	38.0	7.0
72N049*	Yellow S.L. Gr. Tamma	102	9.0	15.7	5.3	42.0	8.2
72N050*	Br.Gr. S.L./Cl. Mottled Red & Yellow	146	13.4	22.4	2.5	11.5	8.2
72N051*	S.L. Gr./Mottled Cl. @ 10-20 cm	76	10.1	14.6	4.0	13.0	7.0
72N052*	Grey Br.S.L./Cl.Kaolin. Granite Sand Plain Mallee	113	7.8	15.7	2.5	11.0	-
72N053*	Yellow L.S. E. oldfieldii	160	9.0	21.3	2.8	12.0	8.0
72N054*	Gr.L.S./Mottled Red Br.Cl.@ 20 cm. Tamma	147	6.7	17.9	2.5	2.0	10.2
72N055*	White S./L.S.@ 50 cm/Gr.@65 cm. Grevillia, Wodgil	147	6.7	17.9	0.3	0.0	7.0
72N056*	Yellow Br.L.S. Tamma and Mallee	177	9.0	22.4	2.2	2.0	11.2
72N057*	Gr.Br. S. Tamma and Mallee	142	4.5	16.8	2.5	5.5	7.0

- NOTES: (i) Abbreviations: S. = Sand(y)
Cl. = Clay
L. = Loam
E. = Eucalyptus
Br. = Brown
Gr. = Gravel(ly)

$$(ii) \sum (0.6)^T = \sum_{i=1}^T x_i (0.6)^T$$

where T is time in years after fertiliser was applied.
 x_i is the amount of fertiliser applied in the year i

$$(iii) \sum T^{-1} = \sum_{i=1}^T x_i T^{-1}$$

Where T and x_i are defined under (ii) above.

Also all superphosphate applied prior to 1961 is assumed to have been applied fresh in 1961 for the sake of these calculations.

- (iv) B.C. is the Buffering Capacity (Ozanne and Shaw, 1967).
P.Sorb is the Padsorbed at 0.3 ppm equilib.soln. concentration.
Olsen P is phosphorus extracted in parts per million using the Olsen 1957 sodium bicarbonate method (1:20 solid soln. ratio at pH 8.5 per $\frac{1}{2}$ hour)

TABLE III - 1972 "DECIDE" SUPERPHOSPHATE TRIALS - SEASONAL
SEASONAL PROGRESS AND ASSESSMENT OF TRIALS

Expt Number	Useful Results	
72BA32	-	Discarded - non-uniform site. Large patch of Bromegrass across plots
72BA33	✓	Assessed dry - 2 replications only; third rep. partially grazed
72GE46*	-	Wheat - Multiple drilling of super - cut by CSIRO
72GE47*	-	Wheat - Multiple drilling of super - cut by CSIRO
72GE48*	✓	Metered and cut; pasture variable
72GE49*	-	Wheat - Multiple drilling of super - cut by CSIRO
72ME23*	-	Wheat - Replicates 2 and 3 had very uneven germination of crop
72ME24*	-	Discarded - patchy weedy pasture - no apparent response - grazed
72ME25*	✓	Wheat - 8 bushell maximum yield
72ME26*	-	Very poor growth (<500 kg/hectare). Not sampled.
72ME27*	✓	Wheat - 12 bushell maximum yield
72ME28*	✓	Wheat - 36 bushell maximum yield
72ME29*	✓	Wheat - 8 bushell maximum yield. Rep. 1 doubtful harvesting results
72ME30*	✓	Metered and cut
72M032	✓	Metered and cut. Poor variable pasture
72M033	✓	Metered and cut. Grazed and ungrazed
72M034	✗	Metered and cut. Headland across the site
72M035	✓	Metered and cut.
72M036	✓	Metered and cut twice. 2 reps only. obvious lupin response to top rate
72M037	✓	Metered and cut. Grazed by cattle
72M038	✓	Metered and cut. Paddock not grazed
72M039	✓	Metered and cut. Grazed and ungrazed. Period of grazing unknown
72M040	✓	Metered and cut. Lupins removed from assessed area
72M041	✓	Metered and cut twice. Rape regrowth early on ungrazed area.
72M042	✓	Metered and cut. Poor growth. Turnip response to super.
72M043	✓	Metered and cut.
72M044	✓	Metered and cut.
72M045	✓	Metered and cut.
72M046	✓	Metered and cut.
72M047*	✓	Metered and cut twice.
72M048*	-	Discarded - Poor growth at each end (site variable).
72M049*	-	Discarded - Plots parallel to last years cropping. Regrowth strips variable.
72M050*	✓	Metered and cut but plots parallel to last years cropping.
72M051*	-	Discarded - sheep wrecked fence and grazed plots.
72M052*	-	Discarded - Poor clover growth - still in drill runs. Sited on headland.
72M053*	-	Discarded - plots parallel to last year's workings, Pure W.R.G. Growth variable.
72NA35	✓	Metered and cut.
72NA36	✓	Metered and cut. Pasture patchy.
72NA37	✓	Metered and cut.
72NA38	-	Discarded. Growth very non-uniform. Mowing showed no response
72NA39	✗	Mown dry. However results dubious due to thunderstorm and super movement.

TABLE III (C'TD)

Expt Number	Useful Results	
72NA40	✓	Assessed dry.
72NA41	✗	Mown and cut dry - dubious results as headland across third replication.
72NA42	✓	Metered and cut while drying off. Apparently uniform.
72NA43	✗	Mown dry and metered while drying - haying off of high clover (P) plots. Also question of whether site was or was not T.D. with 90 lb super in 1972.
72N035	✓	Metered and cut.
72N036	-	Discarded - Poor site. Soil variable. Pasture growth poor and variable.
72N037	✓	Assessed dry.
72N038	-	Discarded - Variable patchy pasture composition. Treatments 1 and 5 mown dry.
72N039	✓✓	Metered and cut. Trial in two halves due to past history.
72N040	✓	Metered and cut. Patchy early growth.
72N041	-	Discarded. Lack of ground cover and patchy pasture growth.
72N042	✓	Metered and cut though pasture patchy.
72N043	✓	Metered and cut. Horses on plots early in season.
72N044	-	Discarded - poor growth and some grazing.
72N045	-	Discarded - poor site. Both soil type and pasture variable.
72N046	✓	Metered and cut twice. Mown dry also.
72N047*	-	Wheat - Multiple drilling of super.
72N048*	-	Wheat - Multiple drilling of super - cut by CSIRO?
72N049*	✗	Raked & visually assessed. No response. Growth poor (<800kg/hectare)
72N050*	-	Wheat - Multiple drilling of super - cut by CSIRO?
72N051*	✓	Metered and cut.
72N052*	-	Discarded - soil and pasture both variable
72N053*	-	Wheat - Multiple drilling of super - cut by CSIRO?
72N054*	-	Wheat - Multiple drilling of super - crop failure
72N055*	-	Wheat - Multiple drilling of super - crop failure
72N056*	-	Wheat - Multiple drilling of super - cut by CSIRO
72N057*	✓	Metered and cut.

TABLE IV - 1972 "DECIDE" SUPERPHOSPHATE TRIALS - YIELD DATA

1972		Yield Data						Statistical A.O.V.			% Legume
D of A (CSIRO) Expt.No.	Date Sampled	Comments	Rate of P (in Super) kg/ha Mean Yield of Pasture "				C.of V. (%)	Treat Signif P <	Block Signif P <		
BA33(24) Badg.R.S.	2 reps 18/12	Dry UG	0 4785	5.7 4335	9.5 4835	17.5 4678	34.9 4340	12.5	N.S.	N.S.	50
GE48(44) Thomas	15/8	UG	0 1840	4.5 1727	9.0 2005	17.9 2035	35.8 2178	7.4	0.05	0.01	20
ME30(54) Whistler	28/9	UG	0 2695	4.5 3065	9.0 2859	17.9 2971	35.8 3230	9.8	N.S.	N.S.	20
M032(27) Slee, S.	18/9	UG	0 1980	5.7 2385	9.5 2167	17.5 2346	34.9 2751	11.7	0.01	0.01	40
M033(28) Slee, G.	13/9 19/10	UG G	0 3212 2089	6.7 3367 2055	12.9 3412 2164	28.0 3497 2668	56.0 3512 2719	4.2 16.4	0.05 N.S.	N.S. N.S.	20 10
M034(29) Spencer, Q.	21/8	UG	0 1194	5.7 1676	9.5 1392	17.5 2215	34.9 2810	11.8	0.001	0.05	70
M035(30) Sper, S.	18/9	UG	0 2459	6.7 2571	12.9 2541	28.0 2645	56.0 2698	8.0	N.S.	0.01	80
M036(31) Bark Stat.	2 reps 25/7 25/9 25/9	UG UG G (800)	0 1243 5190 4100	2.9 1532 5493 4585	5.7 1665 5795 4915	9.5 1521 5768 4255	17.5 2084 6015 5264	14.6 3.2 9.3	0.05 N.S. N.S.	N.S. N.S. N.S.	5 50 5
M037(32) Wolba	19/9	UG	0 2434	5.7 2700	9.5 3013	17.5 3266	34.9 3724	11.6	0.05	0.001	60
M038(33) Dand.	19/9	UG	0 3847	5.7 3965	9.5 4582	17.5 4787	34.9 4435	7.7	N.S.	0.01	10
M039(34) W. Bardia	13/9 13/9	UG G	0 2217 1585	5.7 2830 1840	9.5 2686 1894	17.5 3260 2301	34.9 3560 2513	8.2 8.8	0.001 0.01	N.S. N.S.	10 45
M040(35) Murgoo	13/9	UG	0 2624	6.7 2903	12.9 3241	28.0 3145	56.0 3322	18.4	N.S.	0.05	75
M041(36) N. Veldt	18/9 18/9 (25/7) 1/11 1/11	UG GI UG G II	0 3934 3060 5134 2998	6.7 4000 3231 5791 3408	12.9 4163 3199 5750 3675	28.0 4090 3313 5688 3572	56.0 4637 3632 5852 4189	7.3 17.8 4.8 9.4	0.05 N.S. N.S. N.S.	N.S. 0.05 N.S. N.S.	Nil 90 5 90
M042(37) Rich. South	21/8	UG	0 957	6.7 1549	12.9 1549	28.0 1858	56.0 2018	16.9	0.05	N.S.	70
M043(38) Hardie, S.	21/8	UG	0 2639	2.9 2843	5.7 2668	9.5 2688	17.5 3110	10.7	N.S.	N.S.	40
M044(39) Hardie, R.	21/8	UG	0 1376	5.7 2117	9.5 2039	17.5 2254	34.9 2866	12.4	0.001	0.01	75
M045(40) Joynes 42	31/8	UG	0 2226	9.5 2990	17.5 2918	34.9 3346	69.9 3489	11.5	0.01	N.S.	70
M046(41) Joynes 50	31/8	UG	0 1188	9.5 1703	17.5 1414	34.9 1528	69.9 2548	22.0	0.01	N.S.	70
M047(66) Parker	7/8 26/9 26/9	UG UG G (480)	0 1927 7323 5074	4.1 6598 5264	8.3 7371 5231	16.6 7304 5322	33.2 7197 5140	3.1 5.5 5.8	N.S. N.S. N.S.	0.05 0.05 0.05	60 75 75
M050(69) Scotney	31/8	UG	0 1251	5.6 1298	11.2 1310	22.4 1416	44.8 1819	19.4	N.S.	0.05	20
NA35(1) Camp	12/9	UG	0 3502	4.8 3173	8.6 3496	17.4 3980	34.6 4067	9.0	0.05	N.S.	80

TABLE IV (C'TD)

1972 of A SIRO) pt.No.	Date Sampled	Yield Data						Statistical A.O.V.			% Legume
		Comments	Rate of P (in Super) kg/ha Mean Yield of Pasture "					C.ofV. (%)	Treat Signif P <	Block Signif P <	
36(2) nt. 1	12/9	UG	0	2.2	4.8	8.6	17.4	6.2	0.01	0.001	70
37(3) nt. 2	12/9	UG	0	2.2	4.8	8.6	17.4	4.7	0.01	0.01	60
40(6) neham	20/12	Dry UG	0	8.6	17.4	35.5	69.8	16.1	0.05	N.S.	50
41(8) s Stop 1	20/12	Dry UG UG Mow	0	6.7	12.9	26.9	51.7	10.8	N.S.	0.05	50
			2860	3450	3408	4013	3368	6.1	0.01	0.01	40
42(7) s Stop 2	4/10	UG	0	6.7	12.9	26.9	51.7	9.8	0.01	0.05	20
43(9) d Back	4/10	UG ^b Dry UG Mow	10.1	16.8	23.0	37.0	61.8	11.6	0.05	0.001	50
			2190	2135	2745	3155	2954	9.3	0.05	0.001	40
35(10) d. Te	1/9	UG	0	7.2	14.3	26.9	53.8	23.3	N.S.	N.S.	90
37(12) nd Hill	14/12	Dry UG	0	2.2	4.5	9.0	17.9	9.5	N.S.	0.01	80
39(15) red ntre 1	28/8 28/8	UG (L) UG (P)	0	2.2	4.5	9.0	17.9	7.8	N.S.	0.05	60
			1640	1584	1672	1663	1580	18.2	N.S.	0.05	50
40(16) ntre II	28/8	UG	0	4.5	9.0	17.9	35.8	12.7	0.05	0.001	80
42(21) one Soak	7/9	UG	0	2.2	4.5	9.0	17.9	9.1	0.05	0.001	50
43(17) akton	29/9	UG	0	9.0	17.9	35.8	71.6	6.8	0.05	0.05	55
46(22) lanbee	7/9 17/10 17/10 16/11 16/11 16/11	UG UG GI(1330) UG Mow GI Mow GII Mow	0	4.6	9.2	17.9	35.8	8.0	N.S.	N.S.	65
			3107	3474	3409	3627	3641	6.8	N.S.	N.S.	
			5400	5351	5318	5923	5972	7.2	N.S.	N.S.	
			2236	2187	2448	2481	2594	7.4	N.S.	N.S.	
			3941	4446	4283	4475	4594	6.5	0.05	0.001	
			1526	1633	1805	1612	1870	9.9	N.S.	N.S.	
51(59) s	28/9	UG	0	3.8	7.6	15.2	30.5	14.9	N.S.	0.05	5
57(65) epherd	30/8	UG	0	3.8	7.6	15.2	30.5	9.2	N.S.	N.S.	20
59(5) neham	6/12	UG (Mow)	0	2.2	4.8	8.6	17.4	15.7	N.S.	N.S.	40
			2018	2395	-	-	2408				

38(13) (Syred) Treatments 1 and 5 sampled with mower - no yield differences; mean yield 3750 kg/ha

39(57) (Nottage) Treatments 1 and 5 sampled with rake - no yield differences; mean yield 800 kg/ha

38(4) (Lyneham) Treatments 1 and 5 sampled with mower - no yield difference; mean yield 1550 kg/ha

36(49) (Wahlstein) Visual observation - little growth, therefore no response. Approx. yield 500 kg/ha

possibly topdressed with 90 lb/acre superphosphate in 1972

Using calibration curve from NA42 - pasture haying off.

NOTES ON TABLE IV:

(i) Comments:

Dry - sampled at end of season when dry, using 5 or 6 quadrats/plot

UG - Ungrazed area throughout growing season.

G(II) - Grazed since date of first sampling; yield at first sampling in brackets.

M041 - GI was grazed since 25/7
GII was grazed since 18/9

Mow - Sampled with lawn mower set about $\frac{1}{2}$ " above the ground

M039 - L is area which was previously under lupin

- P is area which was under clover-capeweed pasture.

(ii) All trials had 3 replications sampled except BA33 and M036 where only 2 replications were sampled.

(iii) Percentage legume is a rough estimate of percentage clover on all trials except:

M036 - Lupins

M041 - Serradella